Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method, comprising:

simultaneously reading original values from a plurality of registers;

parsing a dependency-producing instruction;

determining results of the execution of the dependency-producing instruction;

determining a select number of registers among ~~to be modified in~~ the plurality of registers, wherein the select number of registers are to be modified by a second instruction, wherein ~~whose~~ execution of the second instruction is conditional upon the results of the execution of the dependency-producing instruction;

modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction; and

simultaneously writing the original values and the architecturally correct values to the plurality of registers.

2. (Original) The method of claim 1, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

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3.   (Previously Presented) The method of claim 2, wherein said simultaneously reading includes reading values from a plurality of predicate registers.

4.   (Previously Presented) The method of claim 1, wherein said simultaneously reading includes reading values from a plurality of Not-a-Thing (NaT) registers.

5.   (Original) The method of claim 1, wherein said parsing a particular instruction includes parsing an Itanium instruction.

6.   (Original) The method of claim 5, wherein the Itanium instruction selects one register to be modified.

7.   (Original) The method of claim 5, wherein the Itanium instruction selects two registers to be modified.

8.   (Original) The method of claim 5, wherein the Itanium instruction selects 48 registers to be modified.

9.   (Original) The method of claim 5, wherein the Itanium instruction selects up to 63 registers to be modified.

10.   (Previously Presented) The method of claim 1, wherein said simultaneously writing includes writing the values to a plurality of predicate registers.

11.   (Original) The method of claim 10, wherein the plurality of predicate registers includes all 63 predicate registers.

12-22. (Cancelled)

23.   (Currently amended) A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to perform a read-modify-write operation, comprising:

simultaneously reading original values from a plurality of registers;

determining results of a dependency-producing instruction;

determining a select number of registers among ~~to be modified in~~ the plurality of registers, wherein the select number of registers are to be modified by a second instruction, wherein ~~whose~~ execution of the second instruction is conditional upon the results of the execution of the dependency-producing instruction;

modifying a subset of the values in the select number of registers with architecturally correct values comprised of the results of the dependency-producing instruction; and

simultaneously writing the original values and the architecturally correct values to the plurality of registers.

24.   (Previously Presented) The medium of claim 23, wherein said simultaneously reading includes reading values from a plurality of predicate registers.

25.   (Original) The medium of claim 23, further comprising:

providing a means by which an entire set of values may be collectively read or collectively written by instructions that operate on the entire set of values.

26-29. (Cancelled)